In the Claims:

All of the currently pending claims are listed below including any amendments proposed herein. Please amend the claims as follows:

1.   (Original)   A sensing system comprising:-

a deformable load bearing surface ,

a plurality of mutually spaced sensors, said sensors being coupled through the deformation response of the surface to an applied load whereby to receive local sensory data from said surface,

a processor operatively coupled to said sensors and arranged to receive said sensory data from the sensors and to transform said sensory data into information data relating to a load applied to the surface, and an output for outputting the information data,

wherein the processor is arranged to process the sensory data received by all the sensors collectively.

2.   (Original)   The system as claimed in claim 1, wherein the information data has a non-linear relationship with the sensory data.

3.   (Currently Amended)   The system as claimed in claim 1 or 2, wherein said sensors are transducers.

4.   (Original)   The system as claimed in claim 3, wherein said transducers are resistive, optical, Hall effect, capacitance, proximity, or pressure differential based transducers.

5.   (Currently Amended)   The system as claimed in claim 3 or 4, wherein the transducers are physically connected to or in contact with the surface.

6.   (Currently amended)   The system as ~~claimed in any preceding claim,~~ in claim 1 wherein the system comprises a display device for displaying the information data.

7.   (Currently amended)   The system as ~~claimed in any preceding claim,~~ in claim 1 wherein the output of the system serves as an input for a logging system or an automated system for controlling a specific process.

8.   (Currently amended) The system as ~~claimed in any preceding claim,~~ in claim 1 wherein the processor incorporates an algorithm or other interpretation function, such as a neural network or a matrix manipulation technique which receives the sensory data and applies a non-linear transform to produce the information data.

9.   (Currently amended) The system as ~~claimed in any preceding claim,~~ in claim 1 wherein the deformable load bearing surface is resiliently deformable and/or elastic.

10.   (Currently amended) The system as ~~claimed in any preceding claim,~~ in claim 1 wherein the deformable load bearing surface forms part of a housing, the sensors being sealed therein.

11.   (Currently amended) The system as ~~claimed in any preceding claim,~~ in claim 1 wherein the housing contains a flowable material which flows within or under the surface as part of the mechanism of the deformation response of the surface, and the sensors are arranged to detect pressure differentials due to the flow of material.

12.   (Original)   The system as claimed in claim 1 wherein the housing also comprises one or more flow restrictors which affect the flow characteristics of the flowable material upon deformation of the surface.

13.   (Currently amended) The system as ~~claimed in any preceding claim,~~ in claim 1 wherein the surface is planar.

14.   (Currently Amended) A golf swing analyser comprising the system ~~of any one~~ of claims 1 ~~to 13~~.

4

15. (Original) A method of characterising a load applied to a load bearing surface comprising the steps of:-

(i) generating sensory data about the surface from a plurality of sensing elements operably coupled with the surface,

(ii) combining the sensory data into a single vector of inputs for a transformation,

(iii) applying a transformation to the vector of inputs whereby to generate information data characterising the load, and

(iv) outputting the information data.

16. (Original) The method as claimed in claim 15, wherein said transformation of step (iii) is a non-linear transformation.

17. (Currently Amended) A carrier medium carrying a computer executable software program for controlling a computer to carry out steps (ii) and (iii) of claim 15 ~~or 16~~.

18. (Original) The carrier medium of claim 17, wherein said carrier medium is a storage medium, such as a floppy disk, CD-ROM, DVD or a computer hard drive.